

2015
**Design Training
Expo**

Digital Signature & Data Models

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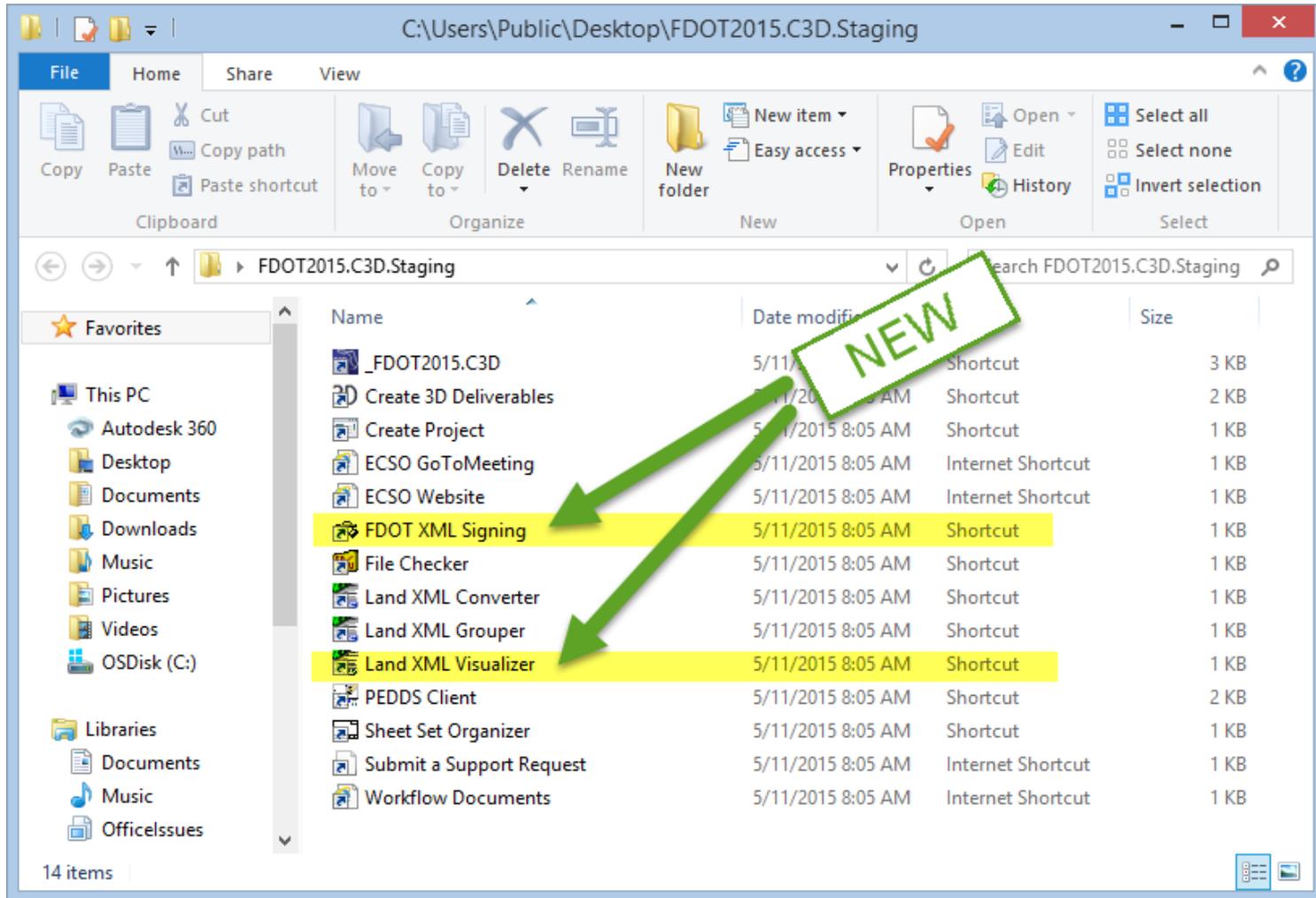
Engineering/CADD Systems Office



Celebrating 100 Years of Innovation, Mobility and Economic Development



New Tools for Signing & Sealing



Types of Data for Electronic Signature

- PostScripts (PS)
- Portable Document Format (PDF)



XML Structure & Definition

- Standard Generalized Markup Language (SGML) 1986
 - Declarative: Should describe a document's structure and other attributes
 - Processed using techniques available to well defined objects.
- Hypertext Markup Language (HTML)
 - The language of the internet
- Extensible Markup Language (XML)



Types of Data for Digital Signature

- XML
 - LandXML (2014)
 - TransXML (2006)
- Office Data Formats
 - docx
 - xlsx
- Native CADD
 - Autodesk
 - Bentley
- Portable Document Format
 - 3D PDF



XML Structure & Definition

http://landxml.com/ LandXML Home

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LANDXML.org

Useful Links For the Consumer Schema Versions About

WELCOME LAND DEVELOPMENT PROFESSIONALS!

Quick Statistics

November 28, 2013

Members: 757
Organizations: 664
Countries: 41
Registered Software: 70

Stay informed and participate by joining the LandXML.org Industry Consortium.

See [LandXML.org members from 2006 mapped in Google Earth](#).

[View the message archives.](#)

LandXML.org in a Nutshell

Launched January 2000, LandXML.org is committed to providing a non-proprietary data standard ([LandXML](#)), driven by an industry consortium of partners. **There is no direct cost to join LandXML.org, nor specific level of participation required.** Once you join, stay informed and participate by using the LandXML discussion email list

News September 4, 2014

LANDXML 2.0 TO BE PRESENTED AT 2014 IHEEP CONFERENCE

LandXML chief architect Nathan Crews will be presenting and discussing the [proposed LandXML 2.0 schema](#) with members of the Florida Department of Transportation at the upcoming [2014 IHEEP conference](#) to be held in New Orleans, LA - September 28 to October 2, 2014.

LANDXML 2.0 – EXPANDING INTEROPERABILITY ACROSS THE ENTIRE PROJECT LIFE-CYCLE

- New LandXML Project Delivery File Specification
 - Electronic Signing and Sealing Features for Document Control
 - Data file versioning
 - Completely portable between applications and office/field
- PointCloud and LIDAR Format for Large Surfaces
- Section Template Formats Supplementing Design Cross Sections
- As-built data collection
- Hydrology Data
- Web Tools to Cross-Check Sections/Alignments to Surface Elevations

LANDXML 2.0 (WORKING DRAFT) SCHEMA ANNOUNCED

The [LandXML 2.0 \(Working Draft\) Schema](#) and [2.0 HTML \(Working Draft\)](#) documentation are now available on the [LandXML Schema Versions & Specifications](#) page.

Work is underway on the LandXML 2.0 schema plan. The following major objectives are planned and, as always, all [feedback](#) is very welcome:

1. Update LandXML 2.0 schema based on current standards: XML 1.1, XML Schema 1.1, XML Namespaces 1.1 and xpath 2.0
2. Engage [OGC](#) and [TransXML](#) to improve adjacent standards interoperability for GIS and business process data flow
3. Incorporate 3D Road model improvements from worldwide input
4. Enhance 3D/volumetric parcel support
5. Enhance data model to better suite intelligent construction data flow

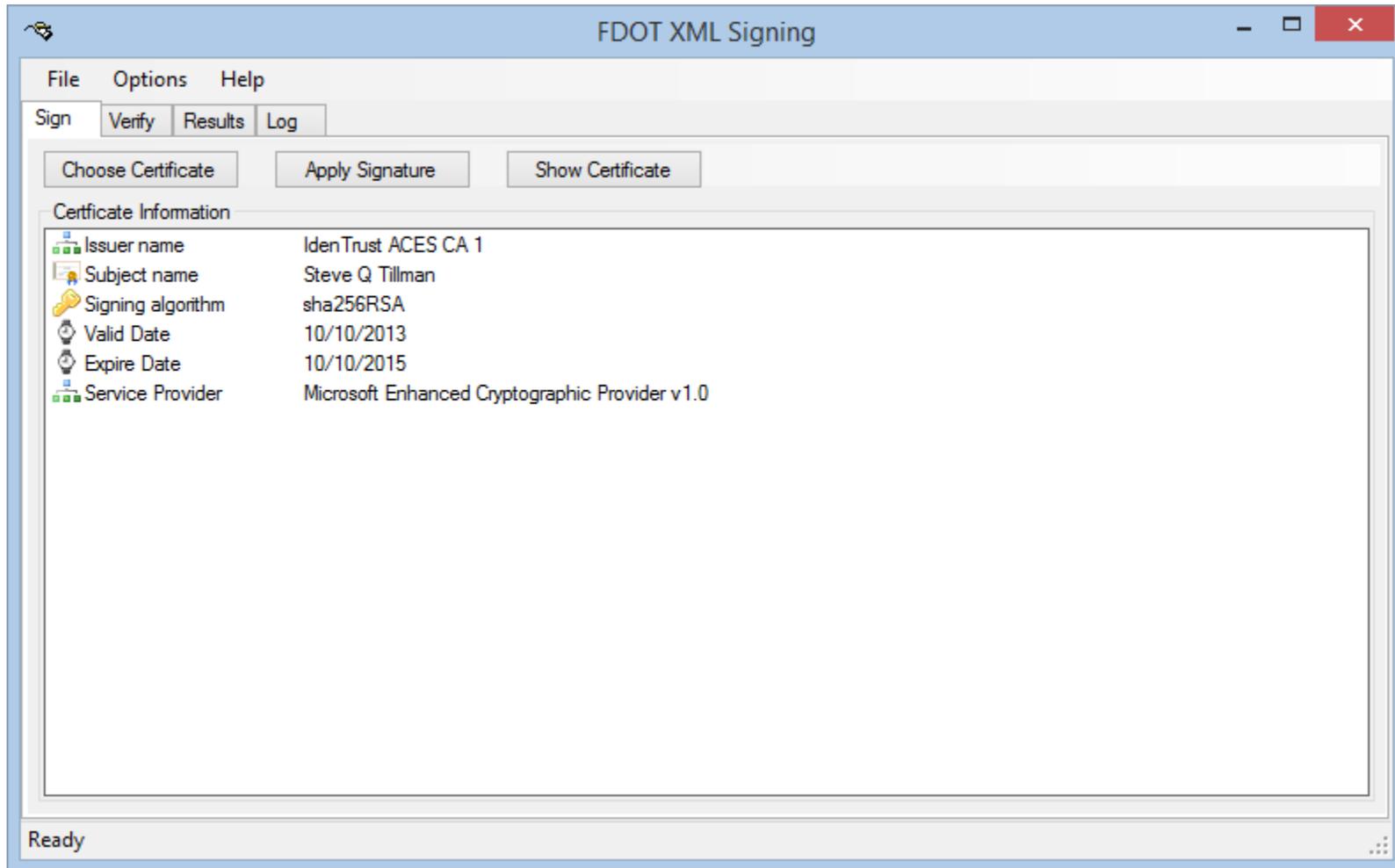


XML Structure & Definition

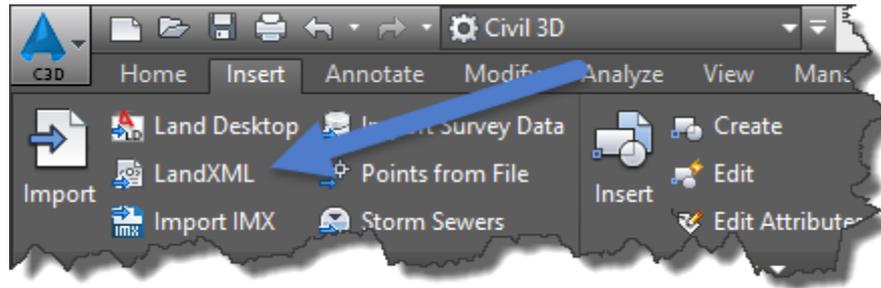
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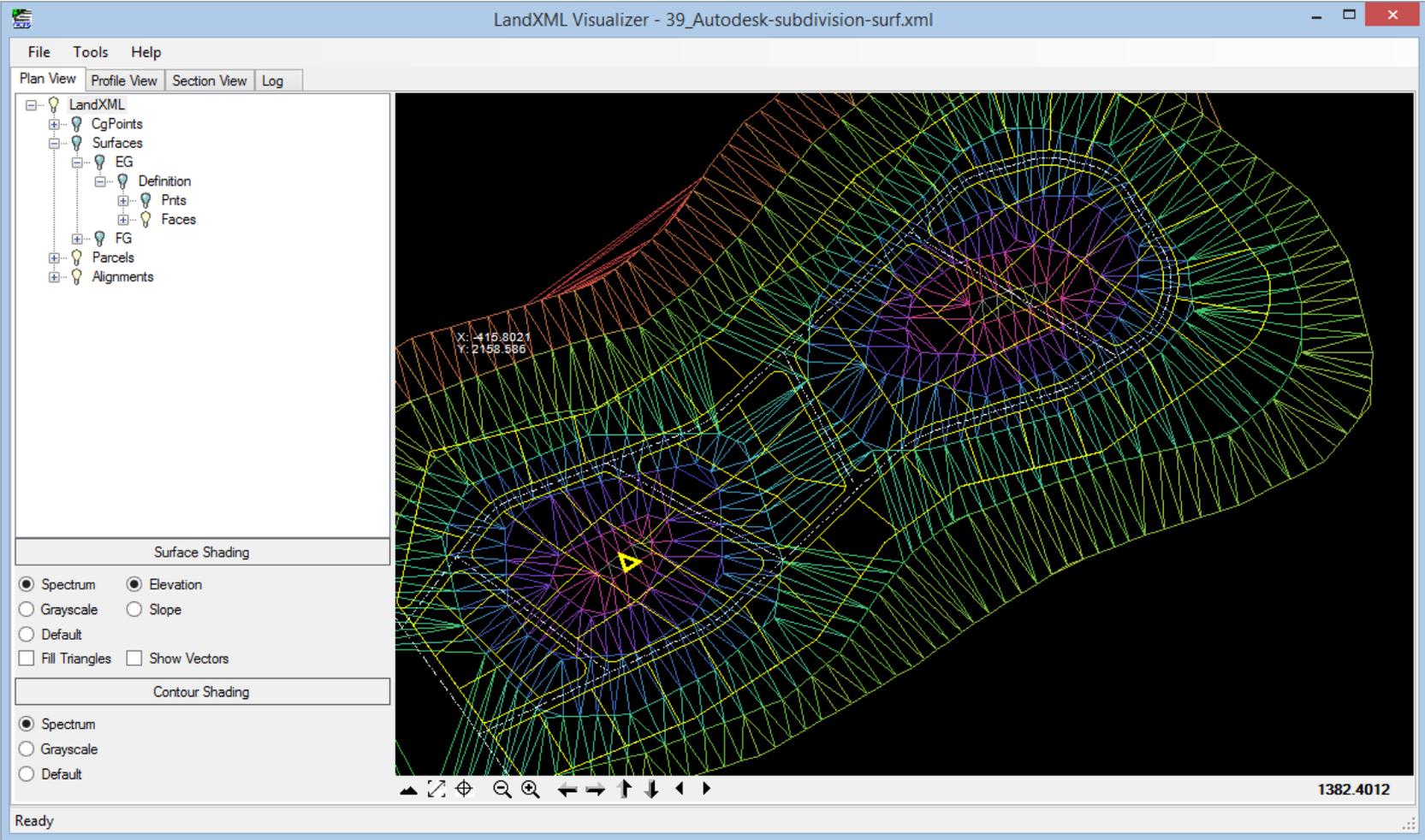
XML Signing Tool



XML Visualizer



XML Visualizer



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